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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/502,389	07/26/2004	Tatsuo Ito	120503	3456

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EXAMINER

VON BUHR, MARIA N

ART UNIT	PAPER NUMBER
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2125

DATE MAILED: 03/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/502,389

Applicant(s)

ITO ET AL.

Examiner

Maria N. Von Buhr

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23-57 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23-57 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>20060726</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Examiner acknowledges receipt of Applicant's preliminary amendment, received 26 July 2004; which cancels claims 1-22, and introduces claims 23-57. Claims 23-57 are now pending in this application.
2. Receipt is acknowledged of papers submitted under 35 U.S.C. §119(a)-(d), which papers have been placed of record in the file.
3. Examiner acknowledges receipt of Applicant's information disclosure statement, received 26 July 2004, with accompanying reference copies. This submission is in compliance with the provisions of 37 CFR §1.97. Accordingly, it has been taken into consideration for this Office action.
4. Examiner acknowledges receipt of Applicant's formal drawings. These drawings are acceptable.
5. The following is a quotation of the second paragraph of 35 U.S.C. §112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which Applicant regards as his invention.

6. Claims 23-57 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

In claims 23, 32 and 45 (and similarly throughout the claims), the phraseology "information of a device manufacturing process as for a device manufacturing process" is grammatically awkward and/or appears to be redundant. It is difficult to understand what the metes and bounds of this phrasing is supposed to be. Also, there is no clear and proper functional antecedence for "selecting a wafer manufacturing process which can manufacture a semiconductor wafer having wafer characteristics corresponding to the information of the device manufacturing process" (or similar language), since no correspondence between any such pieces of information has been clearly provided for, such that selecting can be dependent thereon.

In claim 28, the first occurrence of an abbreviation in the claims must be accompanied by its definition. In this case, "CMP" is not defined in the claim language.

In claims 30 and 31, there is no clear and proper functional antecedence for "printing a laser mark corresponding to the information of the device manufacturing process," since no correspondence between any such elements has been clearly provided for, such that printing can be dependent thereon.

In claims 41, 43, 54 and 56, there is no clear and proper antecedent basis for "the ABC parameter." Further in claims 43 and 56, there is no clear and proper antecedent basis for "the configuration of the back surface of the semiconductor wafer."

The remainder of the claims are rejected as necessarily incorporating the above-noted ambiguities of their parent claims.

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. §102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by Applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by Applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by Applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 23-25, 28, 30, 32-34, 37, 39, 45-47, 50 and 52 are rejected under 35 U.S.C. §§102(a) and 102(e) as being clearly anticipated by Mori et al. (U.S. Patent Application Publication No. 2002/0143424; now issued as U.S. Patent No. 6,725,122), which discloses a “method of selecting a photomask manufacturer” that “includes the steps of storing bidding data sent from a photomask manufacturer, correcting a responded delivery date included in the received bidding data to a corrected delivery date based on a delivery date achieving ratio in a last month, storing priorities relating to a delivery date, technology, order reception and price, reading the corrected delivery date for each of the manufacturers making a bid for a product number to be ordered when the product number is input, calculating total evaluation for each photomask manufacturer based on the plurality of priorities, and selecting the photomask manufacturer satisfying the corrected delivery date and providing the highest result of total evaluation, as the receiver of the order” (the abstract).

As per the claims, Mori et al. teach that it was well known in the art to perform the steps of “information relating to the specifications of the photomask is sent from the orderer, i.e., IC chip manufacturer to the receiver of the order, i.e., a photomask manufacturer in the form of data stored in a magnetic tape or via an online system. The photomask manufacturer produces manufacturing data for the photomask based on the information relating to the received specifications. In addition to this, order information relating to a quantity of photomasks, a requested-date of delivery and others is sent from the IC chip manufacturer to the photomask manufacturer via a telephone or online. Based on the order information, the photomask manufacturer prepares information (manufacturing priority, product number, quantity, delivery destination, delivery date and others) as well as management data including information required for

quality management. The prepared management data is sent to the photomask production line. The photomask production line produces the photomasks based on the manufacturing data and management data. The photomasks are produced by an electron beam exposing device, which is controlled in accordance with the manufacturing data" (paragraphs 5-6). Mori et al. goes on to further teach that "Japanese Patent Laying-Open No. 9-180980 has disclosed the foregoing type of manufacturing system for the IC chips. In this IC chip manufacturing system, an interconnection pattern is changed in accordance with specifications required by a customer. The system includes an input terminal, a processing unit and a production line. The input terminal is used by customers purchasing the IC chips. The input terminal includes an input circuit for entering the information such as specifications and quantity of IC chips requested by the customer. The processing unit includes a preparing circuit, which operates based on the information entered through the input terminal to prepare data required for an exposing step and data required for production management and quality management of the IC chip, and also includes a transmission circuit for transmitting the data prepared by the preparing circuit to the production line. The production line produces the IC chips in accordance with the data transmitted from the processing unit" (paragraph 7). Also see, at least, Figs. 1, 7, 8, 15, 18 and 24, with associated text; including paragraphs 19-20, wherein the "technology data" of Mori et al. is defined as pertaining to the actual manufacturing of the item (i.e.; the manufacturing process/device).

9. The following is a quotation of 35 U.S.C. §103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 26, 27, 29, 31, 35, 36, 38, 40-44, 48, 49, 51 and 53-57 are rejected under 35 U.S.C. §103(a) as being unpatentable over Mori et al. (U.S. Patent Application Publication No. 2002/0143424; now issued as U.S. Patent No. 6,725,122), as applied to claims 23, 32 and 45 above, further in view of Kurosawa (U.S. Patent No. 6,704,093).

Mori et al. teach Applicant's invention substantially as instantly claimed, except for the presence of the "ABC parameters." In this regard, as per claims 26, 27, 35, 36, 41, 42, 48, 49, 54 and 55, the mere presence of a particular type of data, without such data actually being utilized in any way, is not patentably distinguishing, since it is well within the knowledge of one having ordinary skill in the art to include any desired type of data, based upon implementation specifics of the system. In other words, it would have been obvious, to one having ordinary skill in the art, at the time the instant invention was made, to include any

type of data in the system of Mori et al., based upon such implementation criteria as report contents and/or items to be manufactured having specific data constraints/characteristics. Furthermore in this regard, and further as per claims 43, 44, 56 and 57, Kurosawa teaches that it was well-known in the semiconductor manufacturing art to use such "ABC parameters" to control wafer manufacturing processes (see, at least, col. 15, lines 12-37). It would have been obvious, to one having ordinary skill in the art, at the time the instant invention was made, to utilize such parameters in the system of Mori et al., because it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. §103(a), Examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR §1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for Examiner to consider the applicability of 35 U.S.C. §103(c) and potential 35 U.S.C. §102(e), (f) or (g) prior art under 35 U.S.C. §103(a).

12. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure. Applicant is advised to carefully review the cited art, as evidence of the state of the art, in preparation for responding to this Office action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maria N. Von Buhr whose telephone number is 571-272-3755. The examiner can normally be reached on M-F (9am-5pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on 571-272-3749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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Art Unit 2125